

Amendments to the Specification:

Page 5, lines 2-5, amend the paragraph as follows:

It has been discovered that reliable detection of a call-waiting tone can be provided by employing a correlation based technique disclosed herein. A modem employing such a technique need not rely on carrier drop detection and is generally insensitive insensitive to the other energy or noise on the line.

Page 16, lines 8-17, amend the paragraph as follows:

Decoder 360 converts the demodulated complex symbols into a bit stream which is supplied to receiver process 397. Transmit process 396 and receiver process 397 may be the same process. Decoder 360 performs the nonlinear decoding, linear prediction, trellis decoding, constellation decoding, shell demapping, and data de-framing, all as described in respective sections of the V.34 recommendation, which is incorporated herein by reference. Those of skill in the art will recognize a variety of alternative implementations of decoder 360 in accordance with the requirements per the V.34 recommendation. In addition, those of skill in the art will recognize a variety of alternative configurations of decoder 360 suitable to modem implementations in accordance with other communications standards such as V.32, V.32*bis*, etc.

Page 17, lines 10-22, amend the paragraph as follows:

In one embodiment of V.34 modem 120, portions of the receive path may be disabled during a doze mode. Operations of such an embodiment, including transitions between steady state communications state and doze state are described in greater detail in a co-pending patent application Serial No. 08/780,611 entitled, "SYSTEM AND METHOD FOR REDUCING PROCESSING REQUIREMENTS OF MODEM DURING IDLE RECEIVE TIME," naming Zarko Draganic as inventor and filed on January 8, 1997, the entirety of which is hereby incorporated by reference. In such an embodiment, inclusion of call-waiting tone detector 399 in the set of undisabled receive path structures active during a doze state advantageously allows detection of an incoming call even during idle receive time. Because[.,] call-waiting tone

Appln No. 10/795,920

Amendment date May 31, 2005

detection can be performed as described above by performing correlations on subsets of the received samples for a given block, call-waiting tone detector 399 consumes few processor cycles and does not significantly affect processor load during doze mode.